

ABSTRACT

[PROBLEMS]

To provide a membrane material that realizes effective and efficient separation of a target substance of micron size, being easy to handle and that can be worked into various forms; a blood filtration membrane and a leukocyte removing filter unit that realizes a substantial reduction of filter material volume while retaining high capability of removing leukocytes, thereby reducing the loss of hemocyte suspension; and a cell culturing diaphragm suitable for co-culturing and a relevant method of cell culturing.

[MEANS FOR SOLVING PROBLEMS]

There is provided a composite porous membrane comprising a porous membrane comprised of an organic polymeric compound, and a supporting porous membrane adjacent to the porous membrane, characterized in that the organic polymeric compound constituting the porous membrane penetrates in at least part of a surface adjacent to porous membrane of the supporting porous membrane, the porous membrane having specified opening ratio, average pore diameter, standard deviation of pore diameter, ratio of through pore, average membrane thickness, standard deviation of membrane thickness and internal structure, and that the supporting porous membrane has communicating pores of $0.5D \mu\text{m}$ or greater average pore diameter. Further, there are provided a blood filtration membrane comprising the composite

porous membrane; a leukocyte removing filter unit comprising the composite porous membrane as a second filter; and, utilizing the composite porous membrane, a cell culturing diaphragm and method of cell culturing.